## Josiam, Raji

From: Jim Zubrow@keyenvir.com]
Sent: Thursday, May 16, 2013 4:52 AM
To: Josiam, Raji; Mike.Bollinger@trmi.biz

Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky; Hueni,

Camille; Angela Gatchie

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Attachments: Table 3.xls

#### Good Morning Raji:

The attached table includes the TCL list for VOCs and SVOCs, Method Detection Limits (MDLs) and Reporting Limits (RLs). MDLSs and RLs are also provided for the five metals of interest for the South Cavalcade site. The TCL lists are the universally the same – it is the MDLs that may change from lab to lab. Mike and I are travelling today but if you need anything send us email or call our cell phones and we will try to contact you during a break in our meeting. Thanks.

Regards

Jim

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 15, 2013 5:35 PM
To: Jim Zubrow; Mike.Bollinger@trmi.biz

Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky; Hueni, Camille

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Jim

I will forward the fact sheet as soon as I get the final version from our CIC folks.

Regarding the sampling, can you send us the TCL list for the SW-846 Methods that Test America uses for methods 8260B and 8270D (this has been revised, rev 4 2007) since each lab has their own TCL list. As long as the TCL list covers all of the COCs the TCL list can be used.

Also, based on Camille's experience with North Cavalcade Street Site (she is copied on this email) and the number of iterations they had to go through before their ROD Amendment was finalized here is something she wants us to check into to ensure we get the complete picture

- In particular, she wanted us to check for the reporting limits for benzo(a)pyrene and pentachlorophenol. Under 8270D, BAP has a quantitation limit of 10 ug/L (however MCL = .2 ug/L); pentachlorophenol has a 50 ug/L quantitation limit (however MCL = 1 ug/L). Pentachlorophenol can be hard to detect, but was finally detected at N. Cavalcade using other methods. At N. Cavalcade, pentachlorophenol was detected even in mid-to-low range naphthalene wells, and is also mobile. There will be other naphthalene-related constituents detected, and they can contribute to risk, so it is important that Beazer reports out all constituents and detections. (though in the past Beazer has indicated that pentachlorophenol was not part of the process analyzing for this will give us the data to prove that and eliminate that as a concern)
- She also recommends that the lab report out all analytes under the methods, underscore detections, and various detection levels, and data qualifiers. The metals list should be pretty standard across the board; ask to see that list and ask that all analytes for that method be reported out (not screened at this point).

If you would like to discuss this please let me know. Thanks.

Raji Josiam Remedial Project Manager US EPA Region 6 1445 Ross Ave, Suite 1200, 6SF-RA Dallas, TX 75202

Email: <u>josiam.raji@epa.gov</u> Direct: 214-665-8529 Fax: 214-665-6660

Superfund: 1-800-533-3508

From: Jim Zubrow [jzubrow@keyenvir.com]
Sent: Wednesday, May 15, 2013 10:17 AM
To: Josiam, Raji; Mike.Bollinger@trmi.biz

Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceq.texas.gov; Mike Valesky

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

#### Good Morning Raji:

We will modify the work plan to indicate that the samples will be analyzed for Target Compound List (TCL) volatile organic compounds by EPA Method 8260B, TCL semi-volatile organic compounds by EPA Method 8270C. The list of metals to be analyzed will remain as is. Please confirm that the analyses for the TCL organic compounds is acceptable or in other words let us know if EPA or TCEQ would prefer that we run the analyses for a different listing of VOCs and SVOCs (e.g., priority pollutants).

Also, please forward a copy of the Fact Sheet once it is finalized. I would like for our field crew to have copies of the Fact Sheet with them in case they are approach by the public or media,. Thank you.

#### Regards:

Jim

From: Josiam, Raji [mailto:josiam.raji@epa.gov]

**Sent:** Tuesday, May 14, 2013 2:36 PM **To:** Jim Zubrow; Mike.Bollinger@trmi.biz

Cc: Abshire, David; Sanchez, Carlos; <a href="mailyn.long@tceq.texas.gov">marilyn.long@tceq.texas.gov</a>; Mike Valesky

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Jim and Mike

Marilyn and I tried to reach both of you and got your voice mail and I left you both voice mail messages.

EPA and TCEQ concur with the changes made to the work plan.

EPA has an additional comment/clarification. Section 2.2.2 in the Revised Work Plan indicates that groundwater samples will be shipped to the lab and analyzed for the analyte list which represents the constituents with remedial goals

specified in the ROD and the complete list of EPA Priority Pollutant PAHs. It also indicates that sample analyses will be performed using EPA Method 8260B (for BTEX), 8270C Low Level (for PAHs), and 6020 (for Metals). Upon discussion with other Remedial Project Managers within EPA, in order to establish the nature and extent of contaminants in groundwater, all the VOC results obtained using method 8260B and SVOC results obtained using method 8270C during the analysis of the above analyte list need to be reported to the EPA and the TCEQ. This is to ensure that any daughter product exceedances are accounted for as well in the evaluations. Please add a sentence in the Revised Work Plan to reflect this. As specified on page 25-2 of the Quality Assurance Manual (Appendix B of the Key Environmental Quality Assurance Project Plan (QAPP)) the report is to include Sample ID and Well ID cross reference sheet, Sample IDs, method used, Practical Quantitation Limits or Reporting limit, Method detection limits, Definition of Data qualifiers and reporting acronyms, and sample results.

I will send a letter with this comment also.

Please call me at 214-695-6825 if you wish to discuss these comments.

Raji Josiam Remedial Project Manager US EPA Region 6 1445 Ross Ave, Suite 1200, 6SF-RA Dallas, TX 75202

Email: <u>josiam.raji@epa.gov</u> Direct: 214-665-8529 Fax: 214-665-6660

Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:izubrow@kevenvir.com]

**Sent:** Monday, May 13, 2013 2:35 PM **To:** Josiam, Raji; Mike.Bollinger@trmi.biz

Cc: Abshire, David; Sanchez, Carlos; marilyn.long@tceg.texas.gov; Mike Valesky

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

#### Good Afternoon Everyone:

Attached is the revised TI Zone Delineation Work Plan for the South Cavalcade Site. The document is provided in tracked changes format to facilitate identification of the changes that were made in response to the May 8, 2013 EPA comment letter. The Work Plan Figures and a response to comment letter are also attached.

I will have our word processing personnel pull together a complete clean copy of the Work Plan for your files but I wanted to distribute the revisions for review as quickly as possible. If you have any questions or comments, please feel free to contact me or Mike Bollinger.

From: Josiam, Raji [mailto:josiam.raji@epa.gov]
Sent: Wednesday, May 08, 2013 4:48 PM

To: Mike.Bollinger@trmi.biz

Cc: Abshire, David: Sanchez, Carlos: marilyn,long@tceg.texas.gov; Mike Valesky: Jim Zubrow

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

Attached are EPA and TCEQ comments.....

Mike you will get the original in the mail. Others, this electronic copy in the only one that will be sent.

Raji Josiam Remedial Project Manager US EPA Region 6 1445 Ross Ave, Suite 1200, 6SF-RA Dallas, TX 75202

Email: <u>josiam.raji@epa.gov</u> Direct: 214-665-8529 Fax: 214-665-6660

Superfund: 1-800-533-3508

From: Jim Zubrow [mailto:jzubrow@keyenvir.com]

Sent: Thursday, May 02, 2013 7:09 AM

To: Josiam, Raji; marilyn.long@tceq.texas.gov; Mike.Bollinger@trmi.biz; Mike Valesky; Donna.Kopach@trmi.biz

Subject: RE: South Cavalcade - Draft TI Zone Delineation Work Plan

#### **Good Morning:**

Attached is the Quality Assurance Manual for the Test America Laboratory in Buffalo, New York. This laboratory has the capability to analyze for PAHs using the Low Level GC/MS method (EPA SW-846 Method 8270C). This document comprises Appendix B of the Key Environmental Quality Assurance Project Plan (QAPP) which is Appendix D to the draft Technical Impracticability Zone Work Plan that we submitted for review yesterday. Please contact me with any questions.

From: Jim Zubrow

**Sent:** Wednesday, May 01, 2013 3:09 PM **To:** Josiam, Raji (<u>Donna.Kopach@trmi.biz</u>)

Subject: South Cavalcade - Draft TI Zone Delineation Work Plan

### Good Afternoon Raji and Marilyn:

Attached for your review, is the draft TI Zone Delineation Work Plan for the South Cavalcade Site. If you feel a conference call would be beneficial in facilitating and expediting your review let us know and Mike Bollinger and I will make ourselves available. Thank You.

James Zubrow, P.G. Principal Hydrogeologist Key Environmental, Inc. 200 Third Avenue Carnegie, PA 15106 Main (412) 279-3363 Direct (412) 428-9387 Mobile (412) 527-2356

# TABLE 3 LABORATORY MDL/RL SUMMARY

COI	MDL	RL
	(ug/L)	(ug/L)
TCL VOCs	, ,	
1,1,1-Trichloroethane	0.82	1
1,1,2,2-Tetrachloroethane	0.21	1
1,1,2-Trichloroethane	0.23	1
1,1,2-Trichloro-1,2,2-trifluorethane	0.31	1
1,1-Dichloroethane	0.38	1
1,1-Dichloroethene	0.29	1
1,2,4-Trichlorobenzene	0.41	1
1,2-Dibromo-3-Chloropropane	0.39	1
1,2-Dibromoethane	0.73	1
1,2-Dichlorobenzene	0.79	1
1,2-Dichloroethane	0.21	1
1,2-Dichloropropane	0.72	1
1,3-Dichlorobenzene	0.78	1
1,4-Dichlorobenzene	0.84	1
2-Hexanone	1.24	5
2-Butanone	1.32	10
4-Methyl-2-pentanone	2.1	5
Acetone	3	10
Benzene	0.41	1
Bromodichloromethane	0.39	1
Bromoform	0.26	1
Bromomethane	0.69	1
Carbon Disulfide	0.19	1
Carbon Tetrachloride	0.27	1
Chlorobenzene	0.75	1
Dibromochloromethane	0.32	1
Chloroethane	0.32	1
Chloroform	0.34	1
Chloromethane	0.35	1
cis-1,2-Dichloroethene	0.81	1
cis-1,3-Dichloropropene	0.36	1
Cyclohexane	0.18	1
Dichlorodifluoromethane	0.68	1
Ethylbenzene	0.74	1
Isopropylbenzene	0.79	1
Methyl acetate	0.5	1
Methyl tert-butyl ether	0.16	1
Methylcyclohexane	0.16	1
Methylene chloride	0.44	1
Styrene	0.73	1
Tetrachloroethene	0.36	1

TABLE 3 LABORATORY MDL/RL SUMMARY

COI	MDL	RL
	(ug/L)	(ug/L)
Toluene	0.51	1
trans-1,2-Dichloroethene	0.9	1
trans-1,3-Dichloropropene	0.37	1
Trichloroethene	0.46	1
Trichlorofluoromethane	0.88	1
Vinyl chloride	0.9	1
Xylenes, Total	0.66	2
TCL SVOCs		
Biphenyl	0.034	5
bis(2-chloroisopropyl)ether	0.086	5
2,4,5-Trichlorophenol	0.065	5
2,4,6-Trichlorophenol	0.072	5
2,4-Dichlorophenol	0.056	0.5
2,4-Dimethylphenol	0.3	1
2,4-Dinitrophenol	0.6	5
2,4-Dinitrotoluene	0.034	5
2,6-Dinitrotoluene	0.091	5
2-Chloronaphthalene	0.066	0.5
2-Chlorophenol	0.066	5
2-Methylnaphthalene	0.052	0.5
2-Methylphenol	0.14	1
2-Nitroaniline	0.095	5
2-Nitrophenol	0.062	5
3,3'-Dichlorobenzidine	0.22	5
3-Nitroaniline	0.13	5
4,6-Dinitro-2-methylphenol	0.74	5
4-Bromophenyl phenyl ether	0.091	5
4-Chloro-3-methylphenol	0.053	5
4-Chloroaniline	0.13	5
4-Chlorophenyl phenyl ether	0.046	5
4-Methylphenol	0.094	1
4-Nitroaniline	0.025	5
4-Nitrophenol	0.39	5
Acenaphthene	0.036	0.5
Acenaphthylene	0.056	0.3
Acetophenone	0.1	5
Anthracene	0.034	0.5
Atrazine	0.29	2
Benzaldehyde	0.075	5
Benzo(a)anthracene	0.034	0.3
Benzo(a)pyrene	0.13	0.18
Benzo(b)fluoranthene	0.063	0.3

TABLE 3
LABORATORY MDL/RL SUMMARY

	MDL	RL
COI	(ug/L)	(ug/L)
Benzo(g,h,i)perylene	0.058	0.5
Benzo(k)flouranthene	0.07	0.3
Bis(2-chloroethoxy)methane	0.064	5
Bis(2-chloroethyl)ether	0.072	5
Bis(2-ethylhexyl)phthalate	0.42	5
Butyl benzyl phthalate	0.16	3
Caprolactam	0.22	5
Carbazole	0.079	5
Chrysene	0.074	0.5
Dibenz(a,h)anthracene	0.07	0.5
Dibenzofuran	0.06	5
Diethyl phthalate	0.064	0.5
Dimethyl phthalate	0.057	0.5
Di-n-butyl phthalate	0.35	2
Di-n-octyl phthalate	0.2	5
Fluoranthene	0.08	0.5
Fluorene	0.058	0.5
Hexachlorobenzene	0.22	0.5
Hexachlorobutadiene	0.1	1
Hexachlorocyclopentadiene	0.091	1
Hexachloroethane	0.088	5
Indeno(1,2,3-cd)pyrene	0.11	0.5
Isophorone	0.051	0.5
Naphthalene	0.064	1
Nitrobenzene	0.065	0.5
N-Nitrosodi-n-propylamine	0.06	5
N-Nitrosodiphenylamine	0.07	5
Pentachlorophenol	0.3407	1
Phenanthrene	0.062	0.2
Phenol	0.1	1
Pyrene	0.076	0.5
Metals		
Arsenic	0.078	1
Chromium	0.0.07	1.5
Copper	0.22	1
Lead	0.069	1
Zinc	1.1	10

MDL – Method Detection Limit per most recent Test America – Buffalo study.

RL – Reporting Limit